

BY RISHI SINHA (95A7)

THE IMPORTANCE OF A *CONSCIOUS* ACADEMIC CULTURE

In March 2006, the author visited BITS Pilani's Goa campus to present the material of this article to students and faculty members, urging the students to consciously mold the academic culture that is in the process of being born on that new campus.

EVERY college campus has a unique student culture of tackling the curriculum and approaching career prospects. Common wisdom, rules of thumb, and survival strategies are passed down through generations of students and alumni. This culture, though loosely defined, strongly influences every student's work ethic, approach to academia and career choices. (This academic culture is distinct from the culture of extra-curricular and social activities, though there are mutual interactions.)

Most culture is unconsciously developed. A high level of self-fulfillment among all students can be achieved when they consciously guide and cultivate the academic culture on their campus. When academic activities are guided by a culture rooted in a well-chosen philosophy, those activities will be well-informed and well-directed.

I suggest that each BITS campus adopt this conscious approach to its academic culture: realize that every bit of inter-student communication about education and careers constitutes the campus' academic culture, and

guide all of that communication with a few simple principles. Below, I propose these "few simple principles," but the all-important essence of my message has been stated above: consciously guide academic culture. This means when students talk amongst themselves about courses and careers, they ensure they say things that agree with the "few simple principles" they have chosen to adopt. Principles guide communication; communication creates culture; culture affects actions.

The three simple principles that I think BITSians' academic culture should be based on: context-awareness, retention of learning, and excellence.

CONTEXT-AWARENESS

This is the principle that the student should seek answers to the following questions. Why am I doing this? What role(s) am I being prepared for? What can I do next? What are my predecessors doing? Following this principle means relentlessly seeking information from your predecessors—even those just one step ahead of you. If you wonder what people do after BITS, gather as many alumni profiles as you can find and note

the paths taken. If you wonder what electrical engineers really do, get in touch with a dozen of them at various stages in their careers. If you wonder what technological pursuits are currently important, visit the websites of journals and technology companies. Find publications in your discipline that are tailored for the Bachelor's level of knowledge. The idea is to seek context rather than just tips. Finding out what alumni have done and what they plan to do is more important than asking them how to do something. Ask open-ended questions rather than pointed tactical questions that limit the information you receive. Every graduating BITSian should have a good understanding of the technologist's role, and the only way to do this is by continuously absorbing details of what other technologists are doing.

RETENTION OF LEARNING

This is the principle that the student should retain what he learnt in BITS at least till the end of BITS. I don't intend this to be the gargantuan task that it sounds like. The key is to imagine you are a plumber, an

assertion that no doubt requires some explanation.

An intensive, immersive education such that provided by BITS is chaotic, and I don't say that disparagingly. Most test preparation is a race against time, some tests are cleared by the skin of the teeth, and facts memorized for one test are soon lost in the jumble of other tests. That is the nature of a demanding professional education. It is no wonder that graduating BITSians often wonder how they could be regarded as trained and qualified engineers against the background of the extended chaos that they call their formal education: the 4 a.m. ghoting, purging the brain after each compre, all the randomness involved in getting test answers right. In contrast, our confidence in other tool-wielders like plumbers and mechanics is much higher, regardless of their level of experience. We believe in the clean mental equation Plumbing Problem + Plumber = Plumbing Solution. While we do not need this clarity of our own ability to succeed, it does make it easier for us to excel.

The key to successful retention of learning (and clarity of ability) is to extract order from the chaotic college experience. This changes a course from being a dim memory of many complicated little things to a clear list of a few essential skills. Furthermore, you don't even have to carry these few skills in your head. Successful retention consists of identifying the key concepts and techniques taught in a course, learning them in the classroom, documenting them in a cheat sheet, and retaining the books and notes pertaining to those particular topics. Books and your own

notes are important to retain, because they will recreate your mental context later if and when you need to apply those techniques. As it stands, there are many courses (mostly non-CDCs) that most of us don't consciously retain anything from. Therefore, consciously retaining even one non-trivial technique or concept from each such course would be an improvement. How much is retained from each course is entirely up to the individual. The essential idea is to change a course from a chaotic memory to an ordered checklist, and to be able to resurrect your mental context for the items on the checklist.

EXCELLENCE

The pursuit of excellence is a well-understood principle in BITS. All students recognize that their CGPA is the externally visible sign of achievement and try hard to keep their numbers up. Nevertheless, there are three reasons it is necessary to consciously feed the principle of excellence into the academic culture. First, it emphasizes actual test marks. Too often, a course's reputation as a "low-average" course turns out to be a self-fulfilling prophecy. The ideal academic culture prevents such mental barriers from being reinforced. An emphasis on test marks automatically emphasizes CGPA, and certainly goes beyond it. Second, a conscious emphasis on excellence opens students' eyes to areas of excellence other than the CGPA—a useful effect, since large numbers of students who are unable to break through to the high end of the CGPA scale tend to unconsciously give up on the goal of excellence. Excellence can be achieved in a particular group of courses, a

particular semester or a single research project. Not every student will graduate with a high CGPA, but every student must achieve the goal of excellence in one or two target zones. Third, an emphasis on excellence is useful for the same reason that inspirational posters are useful—explicitly stating a goal helps the mind focus on it, though it may be an obvious goal.

The motivation for urging a conscious cultivation of academic culture based on these three principles goes beyond the desire to improve on what we are already doing. The deeper motivation is to do different things than we have done before, and, of course, to do them well. A BITS education enables us for diverse careers in natural and social sciences, technology and business. When we have enough context-awareness to fully realize our role as trained technologists, and we have absorbed our training methodically so that we retain it and confidently bring it to bear on a problem at a moment's notice, then we can apply ourselves to diverse fields that we previously did not consider. If, at the end of BITS, you can pull out a scroll with a simple and functional summary of the academic knowledge you have acquired, have a good understanding of what people outside BITS are doing with that knowledge, and have distinguished yourself in your chosen test of excellence, you will be ready to fulfill yourself as a true technologist. A conscious academic culture is essential to support this process. Incorporating such a culture into a student body and then perpetuating it is a challenging social exercise that I hope will

stimulate some eager BITSian students.



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Press Club and the Sandpaper team. In his spare time he explores sunny Southern California and obsesses over mid-20th-century Americana.

BY KRITHIKA KALYAN ('00) MORE ON BITS, PILANI, GOA.

A while back, when the threat of my impending quarter life crisis was not looming ever so closer, and when I was not one more trip shy of becoming a non-resident Goan, I along with my then-boss (also a BITSian) and his family managed to purposely get lost on our way back to the holiday resort, where the rest of the office folks were camped, and quickly found ourselves on NH-17. We had carefully planned and included a trip to the Goa campus in the itinerary, even though it meant we would have to endure a grim morning-after scenario. (In case I had not made myself clear yet, it was GOA! It was an all expenses paid trip and it was a Sunday morning!) The last day at Pilani having passed just a few months back for me, I could still distinctly remember the last nasty bump on the Pilani-Delhi road, which made me and the rest of the bus exhibit some gravity defying stunts of our own. "I might have passed out a few years back, but I still know what you are talking about", my boss declared and both of us collectively sighed at the thought of the younglings having it nice and easy these days – I mean, come on, leave alone the smooth ride

and the fact Pilani is the best darn place on mother earth, but you gotta admit - Spending four or five of your impressionable years at Goa is a temptation for anyone!

After passing through a score of industrial plants and regional hubs of multinational electronic giants, we reached campus.

Being a Sunday, there were very few prowling the class rooms. I later dug up information to discover that the first set of students belonged to the 2004 batch. It is hence of little surprise now that there seemed to be so few in the main building and on campus as such, considering we had visited the campus in November 2004. I got across to a couple of students through email and they filled me up with some more tidbits. This batch apparently has more than 550 students and what is heartening is that 40% of this number are girls. (232 out of 564 to be exact). The number of girls in the 2005 batch has seen a dip with the ratio standing at 466:75.

The hostels which face the campus building houses the students based on the batch. The nomenclature followed for naming the hostels has not exactly been inspired by pre-historic god-men, The girls hostels are simply called GH1, GH2 and GH3. In fact, the walls of one of the hostels

are being shared by both the boys and the girls, a thought which was inconceivable at Pilani, much to the agony of some! While the 2004 batch girls occupy GH1 and GH2, all the girls in the 2005 batch stay in GH3, which has been partitioned in order to have the boys use the rest of the building. The curfew hours have now been set at 11 p.m, after a briefly being as 10 p.m initially. The hostels have their own separate wardens, hostel superintendents and assistants. One of the girls from the 2005 batch, Lita Das says that they share a wonderful rapport with their wardens, thanks to their frequent meetings in their common rooms. They also manage to have share an amazing bond amidst themselves, not only by virtue of the combined ghotting routines to cope with the academic rigor, but also due to enthu sessions such as the inter hostel events. They have their own cultural and sports representatives for their hostels who put together such fun events, which find very active participants! The girls just wanna have fun, I guess! They have not exactly being outdone by the boys when it comes to acads either. The girls have also been burning up the mercury on the CGPA scales too with a couple of them being 10 pointers (gulp!).

Aalap Tripathy, a 2004 batch student claims that not only